

REMARKS

Claims 1-21 are pending in this application. By this Amendment, claim 2 is amended. The amendment to claim 2 is to correct an informality, and, therefore, is unrelated to the issue of patentability of claim 2 or any other claim. Reconsideration and withdrawal of the rejections is respectfully requested.

A.) Claim Objections

Claim 2 was objected to due to an informality. Applicant has amended claim 2 to obviate the objection. Withdrawal of the rejection is respectfully requested.

B.) The Section 112 Rejections

Claims 1-21 were rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. Specifically, the Examiner states that the features of “to at least substantially eliminate multipath nulls” and “determining the bearing of a received signal associated with a best path to a quasi-stationary source of the received signal” in claims 1 and 8 raise new matter. Applicant respectfully disagrees and traverses these rejections.

With regard to feature of “to at least substantially eliminate multi-path nulls”, the Examiner’s attention is directed to page 6, lines 7-17, for example, of the present specification. This passage from the specification discusses the limitations of previous receiver/antenna combinations when faced with severely degraded signals. It states that one example of such a severely

degraded signal is one “in a deep null for extended periods...where the deep null” is part of a “quasi-stationary interference pattern created by [a] multi-path propagation environment.” Allowing a receiver to operate in such severely-degraded environments is one of the goals of the present invention.

Because the Examiner has incorrectly stated that the words null or nulls is “nowhere to be found in the specification”, Applicant respectfully requests that the Examiner withdraw this statement and correct the record.

Applicant also notes that, contrary to the Examiner’s statement, one skilled in the art would recognize that “nulls” are an example of a multi-path impairment created by quasi-stationary networks (e.g., wireless LAN systems, cordless telephones, see page 5, line 19 listing these examples just preceding the specification’s discussion of “nulls”).

With regard to the feature of “determining the bearing of a received signal associated with the best path to a quasi-stationary source of the received signal”, Applicant submits that the Examiner is elevating “form over substance.” While the term “best path” is not used in the specification, the specification repeatedly speaks of determining “the bearing of a received signal...so that [an] antenna array may be operated as a phased array in a transmit mode with additional gain provided in the direction of the received signal” (see page 14, lines 5-14; page 19, lines 26-27; page 21, lines 14-23 and page 22, lines 18-20). The result is a “highly directional antenna in both receive and transmit modes” that focuses on signals having the correct bearing

and attenuating or ignoring signals in the same channel" (page 21, lines 14-23).

Given this disclosure, one of ordinary skill would understand that the claimed receiver and its "direction finding means" makes use of a "best path".

Notwithstanding the above, the Applicant has removed these words from claims 1 and 8 because they are not necessary to distinguish the claims over the cited references.

Accordingly, Applicant respectfully requests withdrawal of the §112 rejections.

C.) The Section 102 Rejections

Claims 1 and 4-7 were rejected under 35 U.S.C. §102(e) as being anticipated by Bevan et al. ("Bevan"), U.S. Patent 6,489,923. Applicant respectfully disagrees and traverses these rejections for at least the following reasons.

Applicant submits that Bevan fails to disclose or suggest, *inter alia*, a scanner that is adapted to "at least substantially eliminate multi-path nulls", as recited in claim 1.

Rather, Applicant submits that Bevan is wholly unrelated to resolving severely degraded signals, such as one that involves a null, as in the present invention. Instead, Bevin appears to disclose techniques for correcting Doppler and calibration errors. Bevan itself implies that its techniques are unrelated to multi-path fading when it states that multi-path, among other things, is a "phenomenon which limits the performance of [Bevan's] DF system" but then

declines to address it, focusing instead on Doppler and calibration errors (see page 6, lines 17-24).

Because Bevan fails to disclose each and every feature of claims 1 and 4-7, it is respectfully submitted that Bevan cannot anticipate claims 1 and 4-7 under 35 U.S.C. §102. Applicant respectfully requests withdrawal of the rejections and allowance of claims 1 and 4-7.

D.) The Section 103 Rejections

The Examiner bases a number of rejections on 35 U.S.C. §103(a) namely:

- (a) that claims 2 and 3 are unpatentable over Bevan in view of Schuchman et al. ("Schuchman"), U.S. Patent 6,148,195; (b) that claims 8-17, 20 and 21 are unpatentable over Bevan in view of Boras et al. ("Boras"), U.S. Patent 5,303,240 and in further view of Sole et al. ("Sole"), U.S. Patent 6,150,987; and (c) that claims 8-19 are unpatentable over Bevan in view of Boras, Sole and Schuchman. Applicant respectfully disagrees and traverses these rejections for at least the following reasons.

Applicant notes that each of these claims includes a scanner that, among other things, scans a plurality of antennas to at least substantially eliminate multi-path nulls. As indicated above, Bevan does not disclose or suggest such a feature. In addition, Applicant respectfully submits that none of the additional references discloses or suggests such a feature. Therefore, Applicant respectfully submits that the claims of the present invention would not have been obvious to one of ordinary skill in the art because the combination of

Bevan with any of the other applied references does not disclose or suggest the subject matter of claims 2, 3 and 8-21.

Accordingly, Applicant respectfully requests withdrawal of the pending rejections and allowance of claims 2, 3 and 8-21.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact John E. Curtin at the telephone number of the undersigned below.

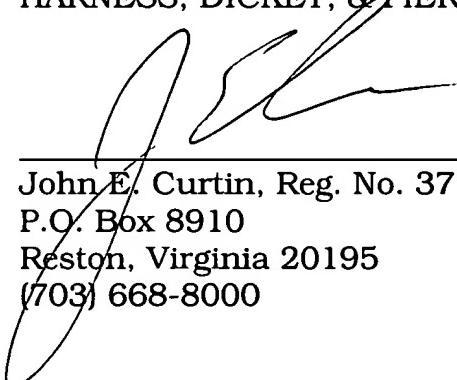
In the event this Response does not place the present application in condition for allowance, applicant requests the Examiner to contact the undersigned at (703) 668-8000 to schedule a personal interview.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

HARNESS, DICKEY, & PIERCE, P.L.C.

By


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